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PTO/SB/08A (08-00)

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) 26

Sheet

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of

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Attorney Docket Number

00/608 217

Complete if Known	
Application Number	09/698,317
Filing Date	October 27, 2000
First Named Inventor	Choi et al.
Group Art Unit	2859
Examiner Name	Unassigned <i>T. Daugherty</i>
Attorney Docket Number	PA09-06V02

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

**Examiner
Signature**

Thomas M. Dougherty

Date
Considered

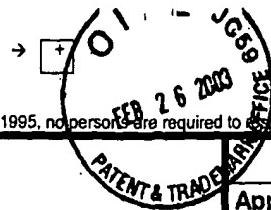
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449B/PTO

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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of

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Application Number	09/698,317
Filing Date	October 27, 2000
First Named Inventor	Choi et al.
Group Art Unit	2859
Examiner Name	Unassigned T. Dwyer
Attorney Docket Number	PA09-06V02

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
TMK	B10	LIN, "Multi-Layer Resist Systems", Introduction of Microlithography, American Chemical Society, 1983, pp. 287-350, IBM T.J. Watson Research Center, Yorktown Heights, New York 10598.	
TMK	B11	COWIE, "Polymers: Chemistry and Physics of Modern Materials", 1991, pp. 408-409, 2 nd Ed, Chapman and Hall, a division of Routledge, Chapman and Hall, Inc., 29 West 35 th Street, NY, NY 10001-2291.	
TMK	B12	CHOU et al., "Imprint of Sub-25 nm Vias and Trenches in Polymers", Applied Physics Letters, November 20, 1995, pp. 3114-3116, vol. 67(21).	
TMK	B13	CHOU et al., "Imprint Lithography with 25-Nanometer Resolution", Science, Apr. 5, 1996, pp. 85-87, vol. 272.	
TMK	B14	CHOU et al., "Imprint Lithography with Sub-10nm Feature Size and High Throughput", Microelectronic Engineering, 1997, pp. 237-240, vol. 35.	
TMK	B15	XIA et al., "Soft Lithography", Agnew. Chem. Int. Ed., 1998, pp. 550-575, vol. 37.	
			TECHNOLOGY CENTER RECEIVED FEB 3 2003 MAR 07 2003 TC 1700
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PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

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of

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<i>Complete if Known</i>	
Application Number	09/698,317
Filing Date	October 27, 2000
First Named Inventor	Choi et al.
Group Art Unit	2834
Examiner Name	Dougherty, Thomas M.
Attorney Docket Number	UTS-09-06V02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>DEC 21 2003</i> <i>(use as many sheets as necessary)</i>		Application Number	09/698,317
		Filing Date	October 27, 2000
		First Name Inventor	Choi et al.
		Group Art Unit	2834
		Examiner Name	Dougherty, Thomas M.
Sheet	2	of	2
		Attorney Docket Number	
		UTS-09-06V02	

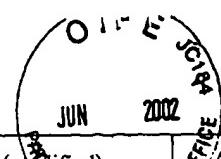
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Signature	Ghemar M. Rosenthal	Date Considered	Sept. 12, 2004
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

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**Form PTO-1449 (modified)**

List of Patents and Publications

For Applicant's Information

Disclosure Statement

(Use several sheets if necessary)

ATTY. DKT. NO. 5119-08601

APPLICANT: Choi et al.

FILING DATE: October 27, 2000

SERIAL NO. 09/698,317

GROUP: 2859

U.S. PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
TMW	A1	3,807,027	4/1974	Heisler	29	423	
TMW	A2	3,807,029	4/1974	Troeger	29	436	
TMW	A3	3,811,665	5/1974	Seelig	26	RECEIVED	
TMW	A4	4,062,600	12/1977	Wyse	384	285	JUN 26 2002
TMW	A5	4,098,001	7/1978	Watson	33	649	
TMW	A6	4,155,169	5/1979	Drake et al.	33	649	GROUP 3600
TMW	A7	4,202,107	5/1980	Watson	33	644	
TMW	A8	4,267,212	5/1981	Sakawaki	427	240	
TMW	A9	4,337,579	7/1982	De Fazio	33	644	
TMW	A10	4,355,469	10/1982	Nevins et al.	267	150	
TMW	A11	4,414,750	11/1983	De Fazio	267	166	
TMW	A12	4,451,507	5/1984	Beltz et al.	427	240	
TMW	A13	4,610,442	9/1986	Oku et al.	269	73	
TMW	A14	4,694,703	11/1987	Routson	74	5F	
TMW	A15	4,731,155	3/1988	Napoli et al.	216	44	
TMW	A16	4,763,886	8/1988	Takei	269	73	
TMW	A17	4,929,083	5/1990	Brunner	356	400	
TMW	A18	4,959,252	11/1990	Bonnebat et al.	428	64.7	
TMW	A19	5,072,126	12/1991	Progler	250	598	
TMW	A20	5,110,514	5/1992	Soane	264	496	
TMW	A21	5,126,006	6/1992	Cronin et al.	438	702	
TMW	A22	5,204,739	4/1993	Domenicali	348	79	
TMW	A23	5,240,550	8/1993	Boehnke et al.	216	24	
TMW	A24	5,348,616	9/1994	Hartman et al.	216	48	
TMW	A25	5,392,123	2/1995	Marcus et al.	356	625	
TMW	A26	5,425,964	6/1995	Southwell et al.	427	10	
TMW	A27	5,452,090	9/1995	Progler et al.	356	401	

EXAMINER:

Thomas M. Kugelby

DATE CONSIDERED:

Feb. 13, 2009

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified)		ATTY. DKT. NO. 5119-08601	SERIAL NO. 09/698,317
List of Patents and Publications For Applicant's Information Disclosure Statement JUN 21 2002 (Use several sheets if necessary)		APPLICANT: Choi et al.	GROUP: 2859
U.S. PATENT DOCUMENTS			

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
TmD	A28	5,480,047	1/1996	Tanigawa et al.	216	12	
TmD	A29	5,512,131	4/1996	Kumar et al.	438	RECEIVED	
TmD	A30	5,515,167	5/1996	Ledger et al.	356	595	JUN 26 2002
TmD	A31	5,545,367	10/1996	Bae et al.	261	481	
TmD	A32	5,566,584	10/1996	Briganti et al.	74	400,04	GROUP 3600
TmD	A33	5,633,505	5/1997	Chung et al.	250	491.1	
TmD	A34	5,724,145	3/1998	Kondo et al.	356	632	
TmD	A35	5,753,014	5/1998	Van Rijn	96	12	
TmD	A36	5,760,500	6/1998	Kondo et al.	310	12	
TmD	A37	5,772,905	6/1998	Chou	216	44	
TmD	A38	5,776,748	7/1998	Singhvi et al.	435	180	
TmD	A39	5,779,799	7/1998	Davis	118	663	
TmD	A40	5,802,914	9/1998	Fassler et al.	74	110	
TmD	A41	5,877,036	3/1999	Kawai	438	16	
TmD	A42	5,877,861	3/1999	Ausschnitt et al.	356	401	
TmD	A43	5,888,650	3/1999	Calhoun et al.	428	354	
TmD	A44	5,900,160	5/1999	Whitesides et al.	216	41	
TmD	A45	5,912,049	6/1999	Shirley	427	240	
TmD	A46	5,942,871	8/1999	Lee	318	611	
TmD	A47	5,948,470	9/1999	Harrison et al.	427	148	
TmD	A48	5,952,127	9/1999	Yamanaka	430	5	
TmD	A49	6,038,280	3/2000	Rossiger et al.	378	50	
TmD	A50	6,039,897	3/2000	Lochhead et al.	264	1,24	
TmD	A51	6,046,056	4/2000	Parce et al.	204	409.05	
TmD	A52	6,051,345	4/2000	Huang	430	5	
TmD	A53	6,074,827	6/2000	Nelson et al.	435	6	
TmD	A54	6,091,485	7/2000	Li et al.	356	73	
	A55	6,128,085	10/2000	Buermann et al.	356	369	

EXAMINER:

Thomas M. Rappleye

DATE CONSIDERED:

Feb. 13, 2004

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the patent owner.

Form PTO-1449 (modified)
 List of Patents and Publications
 For Applicant's Information
 Disclosure Statement JUN 21 2002
 (Use several sheets if necessary)

ATTY. DKT. NO. 5119-08601

SERIAL NO. 09/698,317

APPLICANT: Choi et al.

GROUP: 2859

FILING DATE: October 27, 2000

U.S. PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
JMD	A56	6,143,412	11/2000	Schueller et al.	428	408	RECEIVED
JM	A57	6,168,845	1/2001	Fontana, Jr. et al.	428	65,5	
JMD	A58	6,180,239	1/2001	Whitesides et al.	428	411	JUN 26 2002
JMD	A59	6,204,922	3/2001	Chalmers	356	731	GROUP 3600
JM	A60	6,334,960	1/2002	Wilson et al.	216	52	

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS	REF. DES.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
JMD	A61	00/54107	9/2000	WO	608C	7/08	
JMD	A62	01/33232	5/2001	WO	601R	—	
JMD	A63	01/33300	5/2001	WO	402K	5/24	
JM	A64	244884	3/1987	EP	829C	33/34	
JM	A65	733455	9/1996	EP	829C	33/34	NO
JMD	A66	2800476	7/1978	DE	603C	5/08	NO
JMD	A67	19648844	11/1999	DE	829C	59/02	NO
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EXAMINER: Thomas M. DoughertyDATE CONSIDERED: Feb. 13, 2004

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Form PTO-1449 (modified) List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)			ATTY. DKT. NO. 5119-08601 APPLICANT: Choi et al. FILING DATE: October 27, 2000	RECEIVED SERIAL NO. 09/698,317 GROUP 2859 JUN 21 2002 GROUP 3600
OTHER ARTICLES (Including Author, Title, Date, Pertinent Pages, Etc.)				
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	A70	Paros, J.M.; Weisbord, L.; "How to Design Flexure Hinges", Machine Design, 1965, 151-156.		
	A71	Raibert, M.H.; Craig, J.J.; "Hybrid Position/Force Control of Manipulators", 1981, 102, 126-133.		
	A72	Hogan, Neville; "Impedance Control: An Approach to Manipulation", Journal of Dynamic Systems, Measurement and Control, 1985, 107, 1-7.		
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	A79	Rong, Y.; Zhu, Y.; Luo, Z.; Liu, X.; "Design and Analysis of Flexure-Hinge Mechanism Used in Micro-Positioning Stages", ASME, 1994, 2, 979-985.		
	A80	Hashimoto, M.; Imamura, Y.; "Design and Characteristics of a Parallel Link Compliant Wrist", IEEE International Conference on Robotics and Automation, 1994, 2457-2462.		
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	A82	Ananthasuresh, S.; Kikuchi, N.; "Strategies for Systematic Synthesis of Compliant MEMS", ASME, 1994, 2, 677-686.		
	A83	Arai, T.; Tanikawa, T.; Merlet, J.P.; Sendai, T., "Development of a New Parallel Manipulator with Fixed Linear Actuator", Proc. of Japan/USA Symposium on Flexible Automation, 1996, 1, 145-149.		
	A84	Howell, L.L.; Midha, A.; "Loop-Closure Theory of the Analysis and Synthesis of Compliant Mechanisms", Journal of Mechanical Design, 1996, 118, 121-125.		
	A85	Haisma, J. et al.; "Mold-Assisted Nanolithography: A Process for Reliable Pattern Replication", Journal of Vacuum Science and Technology, 1996, 14, 4124-4128.		
	A86	Pernette, Eric; Henein, Simon; Magnani, Ivo; Clavel, Reymond; "Design of Parallel Robots in Microrobotics", Robotica, 1997, 15, 417-420.		

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	A90	Williams, Mark et al.; "Six Degree of Freedom Mag-Lev Stage Development", SPIE, 1997, 3051, 856-867.	
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	A94	Koseki, Y. et al.; "Design and Accuracy Evaluation of High-Speed and High Precision Parallel Mechanism", Proc. of IEEE, Intl. Conf. on Robotics & Automation, 1998, 1340-1345.	
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	A104	Tanikawa, T. et al.; "Development of Small-Sized 3 DOF Finger Module in Micro Hand for Micro Manipulation", Proc. of IEEE, Intl. Conf. on Intelligent Robots and Systems, 1999, 876-881.	
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List of Patents and Publications For Applicant's Information Disclosure Statement (Use several sheets if necessary)		APPLICANT: Choi et al.	RECEIVED JUN 26 2002 GROUP: 2859
		FILING DATE: October 27, 2002	GROUP 3600
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<i>Tmb</i>	A107	Goldfarb, M.; Speich, J.E.; "A Well-Behaved Revolute Flexure Joint for Compliant Mechanism Design", Journal of Mech. Design, 1999, 121, 424-429.	
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<i>Tmb</i>	A109	Hexel Corporation, Tornado 2000 System Specifications, 1999, from www.hexel.com	
<i>Tmb</i>	A110	Physik Instruments, PI Online-Catalog, 1999, from www.physikinstruments.com	
<i>Tmb</i>	A111	Chou, Stephen; Zhuang, Lei; "Lithographically-induced Self Assembly of Periodic Micropillar Arrays", Journal of Vacuum Science and Technology, 1999, 17, 3197-3202.	
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<i>MWD</i>	A113	Vanderbilt University Office of Transfer Technology; VU 9730 Specifications for Improved Flexure Device; 2001, from www.vanderbilt.edu	
<i>MWD</i>	A114	Stix, Gary; "Getting More from Moore's", Scientific American, 2001, from www.scientificamerican.com	
<i>MWD</i>	A115	Trilogy Systems, Linear Motors 310 Specification, 2001, from www.trilogysystems.com	
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<i>MWD</i>	A117	PCT International Search Report for PCT/US 00/30041, dated 10/15/2001	
<i>MWD</i>	A118	PCT International Search Report for PCT/US 01/26049, dated 2/19/2002	

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